

AMENDMENTSIn the Claims:

Please enter the following replacement claims, pursuant to 37 C.F.R. § 1.121(c), the replacement claims 1-8 replace the correspondingly numbered prior pending claim.

All pending claims, whether added, rewritten, cancelled or amended, have been reproduced below for the convenience of the Examiner. Also included is a marked-up version of the prior pending claim showing the amendments made thereto.

Applicants respectfully submit that no amendments have been made to the pending claims for the purpose of overcoming any prior art rejections that would restrict the literal scope of the claims or equivalents thereof.

E' 1. A method of manufacturing a power transistor circuit, comprising carrying out the following steps in the enumerated order:

- (1) securing a die to a substrate, the die comprising a transistor having an input terminal, the substrate comprising at least one input matching element and at least one input signal lead;
- (2) measuring a performance characteristic of the transistor before connecting the transistor with the input matching element and input signal lead by means of a test network comprising connections with known inductances;
- (3) using one or more wires to electrically couple the transistor input terminal to an input matching element, an input signal lead, or both; and
- (4) setting the impedance of the one or more wires based at least in part on the measured transistor performance characteristic from step (2).

2. The method of claim 1, wherein the performance characteristic is defined, at least in part, by one or more of input capacitance, impedance, gain flatness, and signal phase shift.

3. The method of claim 1, wherein the impedance of the one or more wires is set by selecting a number of wires used to make at least one electrical connection of the transistor circuit.

4. The method of claim 1, wherein the impedance of the one or more wires is set by selecting a length of at least one wire used to make at least one electrical connection of the transistor circuit.

E² 5. A method of manufacturing a power transistor circuit, comprising carrying out the following steps in the enumerated order:

- (1) securing a die to a substrate, the die comprising a transistor having an output terminal, the substrate comprising at least one input matching element and at least one input signal lead;
- (2) measuring a performance characteristic of the transistor before connecting the transistor with the input matching element and input signal lead by means of a test network comprising connections with known inductances;
- (3) using one or more wires to electrically couple the transistor output terminal to an output matching element, an output signal lead, or both; and
- (4) setting the impedance of the one or more wires based at least in part on the measured transistor performance characteristic from step (2).

6. The method of claim 5, wherein the performance characteristic is defined, at least in part, by one or more of output capacitance impedance, gain flatness, and signal phase shift.

7. The method of claim 5, wherein the impedance of the one or more wires is set by selecting a number of wires used to make at least one electrical connection of the transistor circuit.

8. The method of claim 5, wherein the impedance of the one or more wires is set by selecting a length of at least one wire used to make at least one electrical connection of the transistor circuit.

Claim Amendment Version With Markings to Show Changes Made to the PriorPending Claims:

1. A method of manufacturing a power transistor circuit, comprising carrying out the following steps in the enumerated order:

(1) securing a die to a substrate, the die comprising a transistor having an input terminal, the substrate comprising at least one input matching element and at least one input signal lead;

(2) measuring a performance characteristic of the transistor before connecting the transistor with the input matching element and input signal lead by means of a test network comprising connections with known inductances;

(3) using one or more wires to electrically couple the transistor input terminal to an input matching element, an input signal lead, or both; and

(4) setting the impedance of the one or more wires based at least in part on the measured transistor performance characteristic from step (2).

2. The method of claim 1, wherein the performance characteristic is defined, at least in part, by one or more of input capacitance, impedance, gain flatness, and signal phase shift.

3. The method of claim 1, wherein the impedance of the one or more wires is set by selecting a number of wires used to make at least one electrical connection of the transistor circuit.

4. The method of claim 1, wherein the impedance of the one or more wires is set by selecting a length of at least one wire used to make at least one electrical connection of the transistor circuit.

5. A method of manufacturing a power transistor circuit, comprising carrying out the following steps in the enumerated order:

(1) securing a die to a substrate, the die comprising a transistor having an output terminal, the substrate comprising at least one input matching element and at least one input signal lead;

(2) measuring a performance characteristic of the transistor before connecting the transistor with the input matching element and input signal lead by means of a test network comprising connections with known inductances;

(3) using one or more wires to electrically couple the transistor output terminal to an output matching element, an output signal lead, or both; and

(4) setting the impedance of the one or more wires based at least in part on the measured transistor performance characteristic from step (2).

6. The method of claim 5, wherein the performance characteristic is defined, at least in part, by one or more of output capacitance impedance, gain flatness, and signal phase shift.

7. The method of claim 5, wherein the impedance of the one or more wires is set by selecting a number of wires used to make at least one electrical connection of the transistor circuit.

8. The method of claim 5, wherein the impedance of the one or more wires is set by selecting a length of at least one wire used to make at least one electrical connection of the transistor circuit.